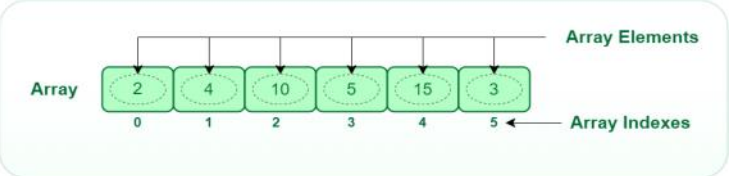
Arrays

25 April 2023 20:23

What Is Arrays?



- An array is a collection of items stored at contiguous memory locations.
- The idea is to store multiple items of the same type together.
- This makes it easier to calculate the position of each element by simply adding an offset to a base value,

One-Dimensional Arrays:

1.int[] arr=new int[5];

2.int arr[]={1,2,3,4,5};

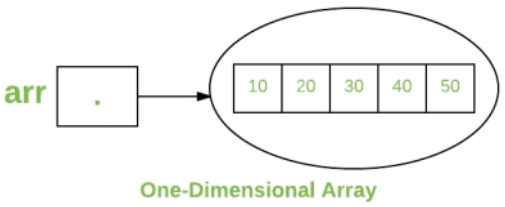
3.int []arr=new int[]{1,2,3,4,5};

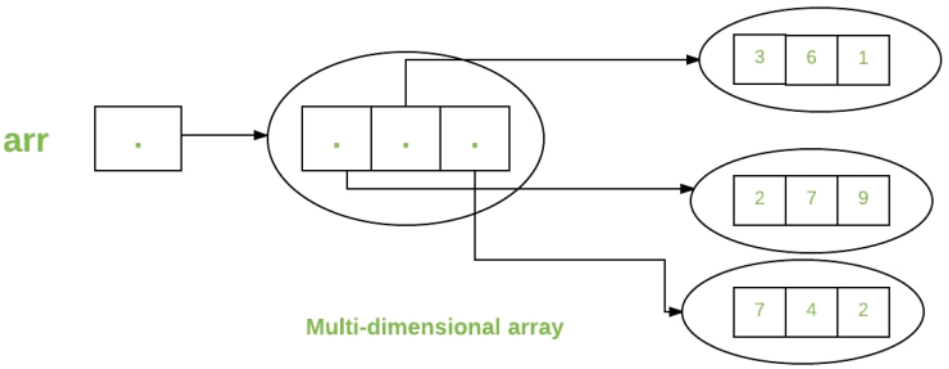
Two-Dimensional Arrays:

1.int[][] arr=new int[5][];

2.int arr[][]={{1,2,},{3,4}};

3.int [][]arr[]=new int[n][]{1,2,},{3,4}};





Discussion:

-ArrayList(Dynamic Array)

- Add element method-list.add()
- Get method-list.get()
- Size-list.size()
- Set element-list.set(index,value)

-for each loop

-initialization of array

1. Reverse of the array element
2. Missing Number
3. Remove Duplicate in a sorted array
   https://leetcode.com/problems/remove-duplicates-from-sorted-array/
4. Rotate Array
5. Find Pair sum equal to k

Challenge problem:

1.

Pair Sum / Two Sum (LC: 1) - HW

i/p : arr = {2,1,5,6,3,7}, k = 11

o/p : 2,3

pair is 5 and 6

2. ***First and Second Largest element***
3. ***Find The leader Element***
4. ***Dutch National(sort 0,1,2)***
5. ***Rotate array with reverse logic***